A photograph of a lagoon or pond. In the background, there is a dense line of trees with some autumn-colored foliage. A small, light-colored structure is visible on the far shore. The water is calm, reflecting the sky and trees. In the foreground, there is a grassy bank with some tall, dry grass. A small, light-colored boat is on the water near the center. The text "Using the N.C. Nutrient Management Software to develop a Cleanout or Closure Plan for Lagoon Sludge" is overlaid in a large, bold, dark blue font with a white outline.

Using the N.C. Nutrient Management Software to develop a Cleanout or Closure Plan for Lagoon Sludge

Module 6

Lagoon Sludge Cleanout/Closure



- References.....(3)
- Sludge Non-Compliance (DWQ).....(4)
- SB 1217 Sludge Removal Planning Considerations.....(5-10)
- Create a New Data File.....(11)
- Main Screen – Input Basic Data.....(12-16)
- Input Closure/Cleanout Source Details.....(17-22)
- Create a New Plan.....(23-24)
- General & Sources Tabs.....(25-26)
- Fields Tab – Tracts, Fields, Crops.....(27-30)
- Edit Nutrients.....(31-34)
- Narrative and Cleanout/Closure Tabs.....(35-36)
- Print Preview and Print.....(37)

References (with active hyperlinks)

- [SB1217 9th Guidance Document – Section 1.26 SLUDGE REMOVAL PLANNING, Appendix 1.26B DSWC Copper and Zinc Projection Worksheet](#)
- [NCCES Extension Publication AG639W: ‘Sludge Survey Methods for Anaerobic Lagoons’.](#)
- [NCCES Extension Publication AG604: ‘Sludge Management & Closure Procedures for Anaerobic Lagoons’.](#)
- [NRCS Conservation Practice Standard Code 360: Closure of Waste Impoundments.](#)
- NC DWQ Sludge Survey Forms (Revised August 2008): [Appendix 1. Lagoon Sludge Survey Form](#), [Appendix 2. Sludge Survey Data Sheet](#), [Appendix 3. Worksheet for sludge volume and treatment volume.](#)
- [NC DWQ Form SPOA 3-22-2010: Plan Of Action \(POA\) For Lagoon Sludge Reduction.](#)
- Sludge Removal Contractors in N.C.:
<http://www.bae.ncsu.edu/programs/extension/manure/sludge/sludgejockeys.html>

Sludge Non-Compliance (DWQ)

If sludge accumulation in the treatment volume exceeds 50% of the planned treatment volume, the sludge should either be removed or managed in accordance with a DWQ-approved Sludge Management/Operation Plan.

1.26 Sludge Removal Planning

Excerpts from SB1217 9th Guidance Document



Periodic sludge removal:

A Technical Specialist develops A WUP conditional amendment that outlines sludge removal and land application procedures.

The amendment including calculations, application rates, sludge survey measurements, maps and other related documents are considered part of the CAWMP; must contain the items noted in section 1.6; and must be based on the following items and/or considerations:



1.26 Sludge Removal Planning

Excerpts from SB1217 9th Guidance Document



- **The method of removal will have a significant impact on volume and nutrient concentration of material removed:** agitation and pumping will result in a high volume of slurry (sludge and liquid), versus dredging which results in a lesser volume (sludge and some liquid).

Volume estimates and waste sampling should appropriately reflect the material (solid vs. liquid) that will be applied.



1.26 Sludge Removal Planning

Excerpts from SB1217 9th Guidance Document



- **Sludge should be applied only to fields not used for continual animal waste application** to prevent prohibitive phosphorus and persistent metal build-up. If applied on fields already listed in the CAWMP the applications are to be recorded as part of the annual nutrient budget for that field.
- **Obtain representative sludge and liquid analysis prior to sludge removal** to accurately determine PAN, P, Cu and Zn.
- **Soil samples** obtained (1) within the 24 mo. prior to sludge application and (2) following the most recent waste application prior to the proposed sludge application. Use this report to estimate persistent metal (Cu & Zn) effects on soil indices.



1.26 Sludge Removal Planning

Excerpts from SB1217 9th Guidance Document



- **Estimate potential increases in levels of copper and zinc in soils** during plan development. The DSWC Copper and Zinc Projection Worksheet (Appendix 1.26B) may be used to provide a conservative estimate of increase in soil index values. Due to inherent variability of waste/soil sampling, it is recommended that conservative soil target levels be set for copper (e.g. Cu-I < 700-1000) and zinc (e.g. Zn-I < 300 for land where peanuts may be grown; for other cropland Zn-I < 700-1000).

- **New fields** receiving animal waste or sludge for the first time **must meet current setbacks, buffers and other requirements** as described in sections 1.8 and 8.1 (SB1217 9th Guidance Document).



1.26 Sludge Removal Planning

Excerpts from SB1217 9th Guidance Document



- Provisions must be taken to **prevent damage** to lagoon dikes and liner.
- If sludge is applied on **conventionally tilled bare soil**, the waste shall be **soil-incorporated within 2 days** after application or before the next rainfall event, whichever is first.
- Permittee is to **document sludge applications** to all fields (owned/leased) in the sludge plan **and balance priority nutrients using** a current waste analysis (within 60 days), on SLUR-1/SLUR-2 forms, or other DWQ-approved forms.



1.26 Sludge Removal Planning

Excerpts from SB1217 9th Guidance Document

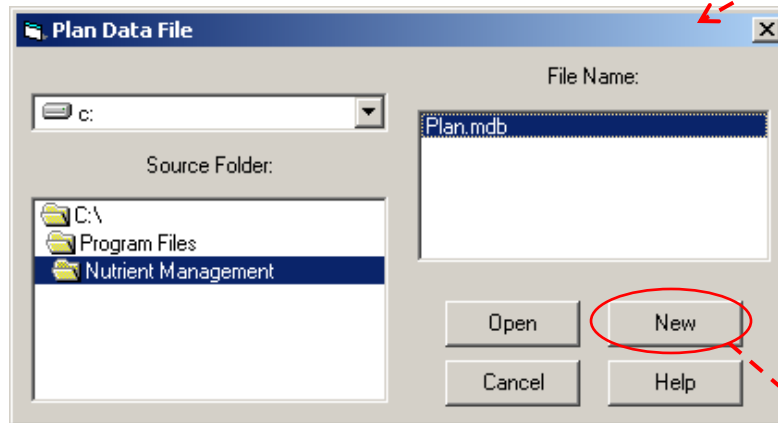


- For NPDES, and other subject facilities (identified by DWQ), **PLAT** must be completed and all applicable standards met.
- For **sludge transfers**, the **Permittee** must document the name and address of the recipient, and volume of sludge removed. The third party receiver is to be provided with a current sludge/liquid waste analyses and information for proper land application as required by the farm's permit.
- The **third party receiver** is responsible for obtaining coverage under the appropriate DWQ permit, and for the documentation and proper land application of the sludge on the approved site(s).

Create a New Data File

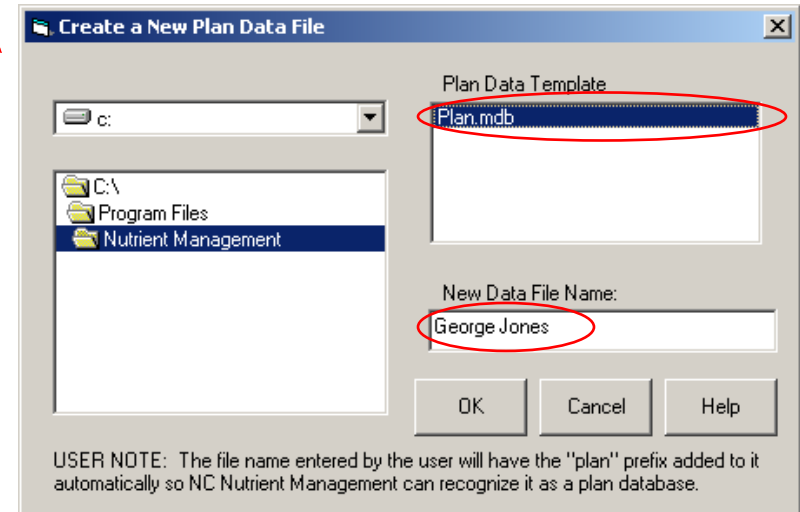


1) Double-click the **Icon** and the Plan Data File box will appear.

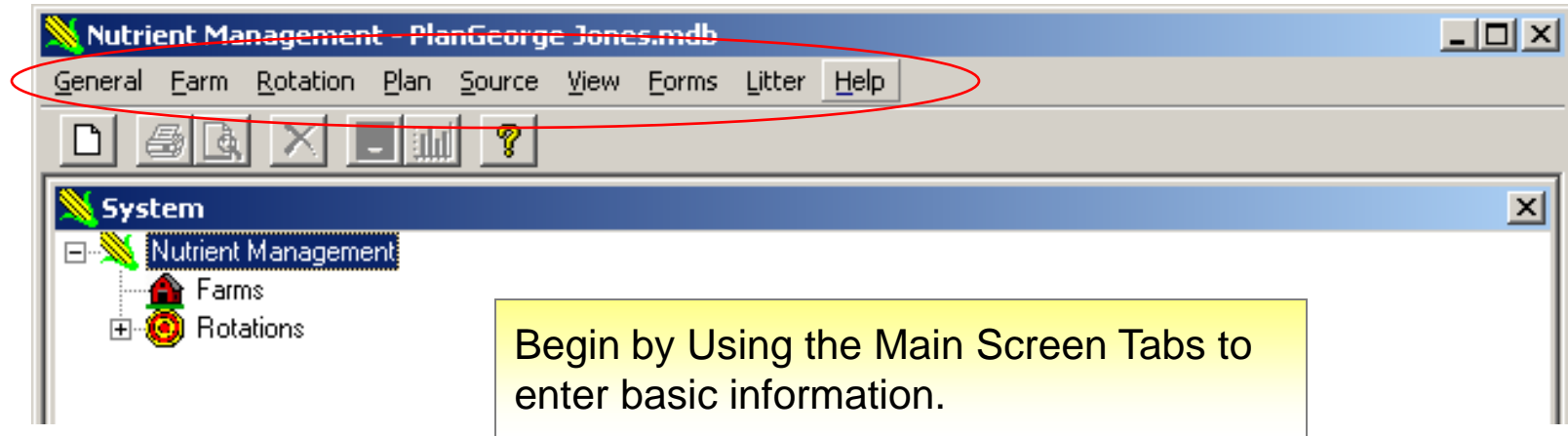


2) Click on
“New”

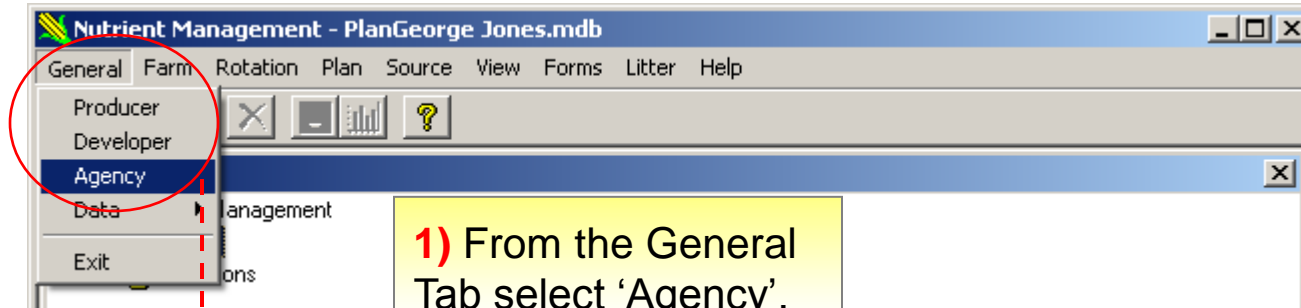
3) Select the Plan.mdb Template and name the New Data File (often the producer's first and last name).



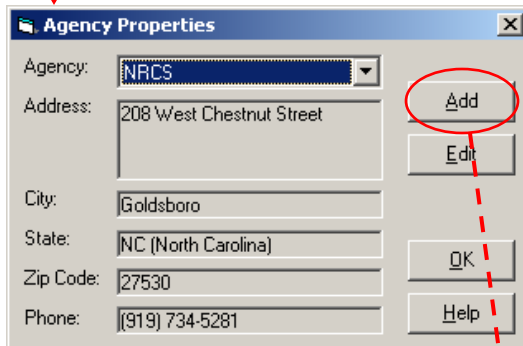
Main Screen



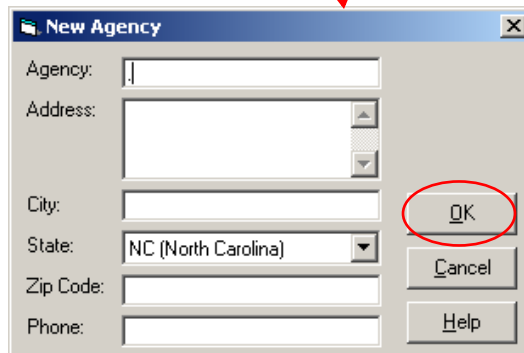
Main Screen – Agency



1) From the General Tab select 'Agency'.

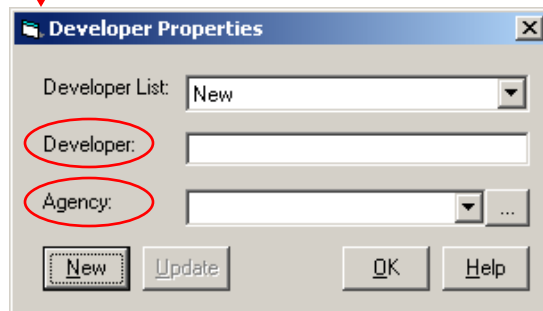
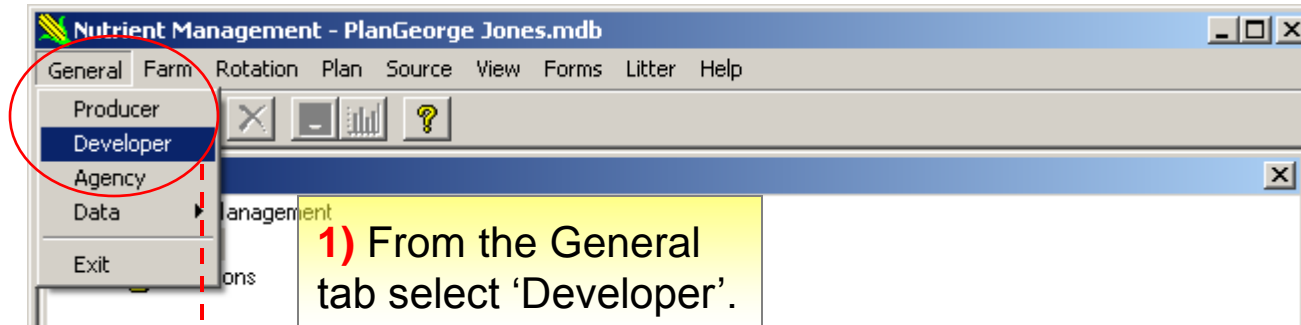


2) Use the <Add> button to Add a new Agency



3) Enter all agency information and click <OK> to save

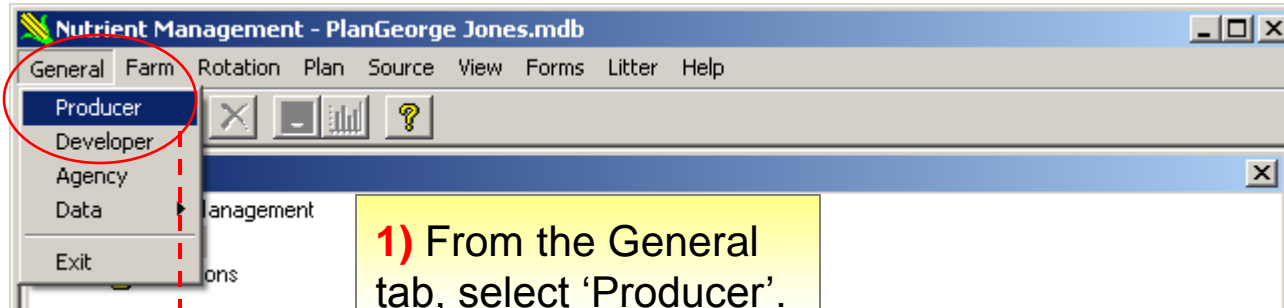
Main Screen – Developer



2) Select 'New' from the drop-down list.

3) Enter Developer name.
4) select corresponding Agency from that drop-down list and click 'OK' to save

Main Screen – Producer



Producer Properties

Producer: [dropdown]
Last Name: [text]
Middle Name: [text]
First Name: [text]
Address: [text]
City: [text]
State: [text]
Zip Code: [text]
Phone: [text]

Add
Edit
OK
Help

2) Use the <Add> button to Add a new Producer

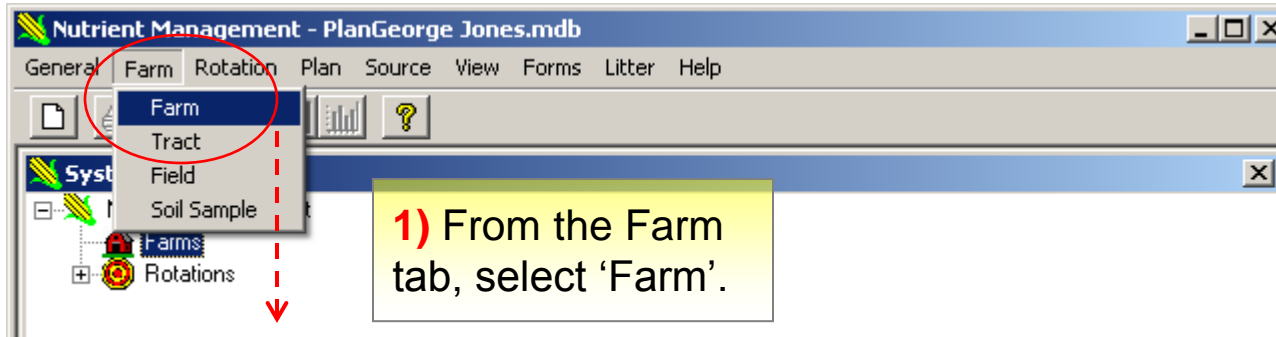
New producer

Last Name: [text]
Middle Name: [text]
First Name: [text]
Address: [text]
City: [text]
State: [text]
Zip Code: [text]
Phone: [text]

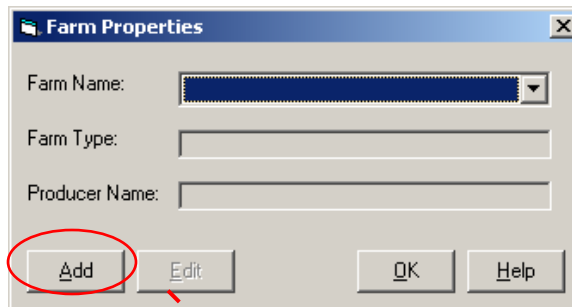
OK
Cancel
Help

3) Enter all producer information and click <OK> to save

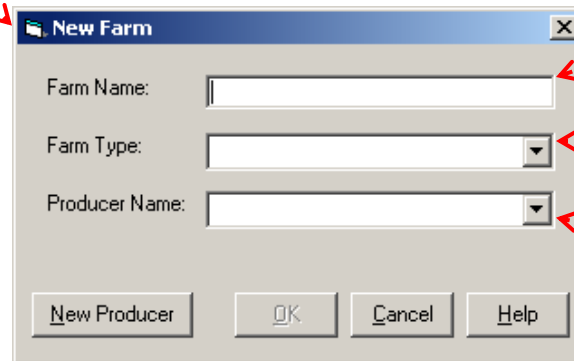
Main Screen – Farm



1) From the Farm tab, select 'Farm'.



2) Use 'Add' to add a new Farm

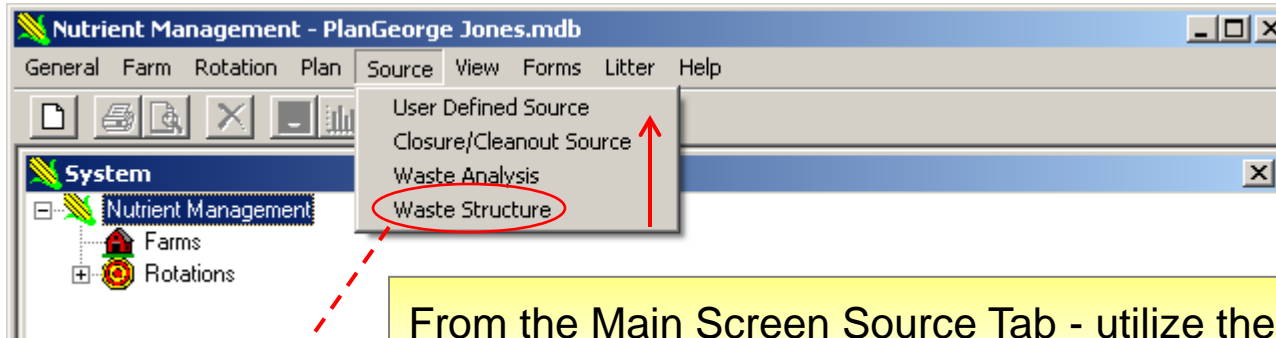


3) In the New Farm dialog box Add Farm Name

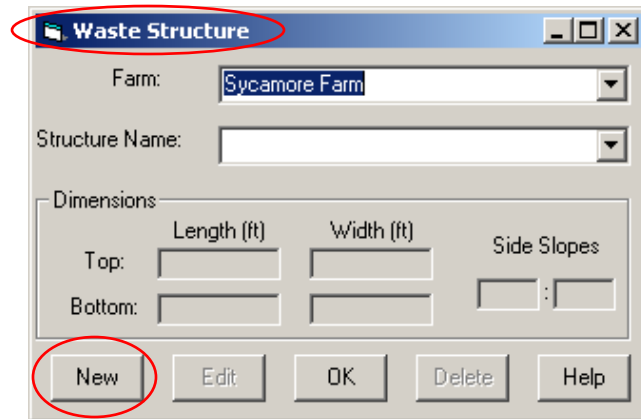
4) Select Farm Type (Existing, Expanding, or New)

5) Select Producer Name to be associated with this Farm and click <OK> to save

Source – Waste Structure



From the Main Screen Source Tab - utilize the Source drop-down menu items in reverse order (i.e. from bottom to top).



- 1) Begin by selecting 'Waste Structure'.
- 2) Identify the appropriate Farm from the drop-down menu.
- 3) Use the 'New' button to identify a new waste structure.

Source – Waste Structure



New Waste Structure

Farm: Sycamore Farm

Structure Name

Dimensions

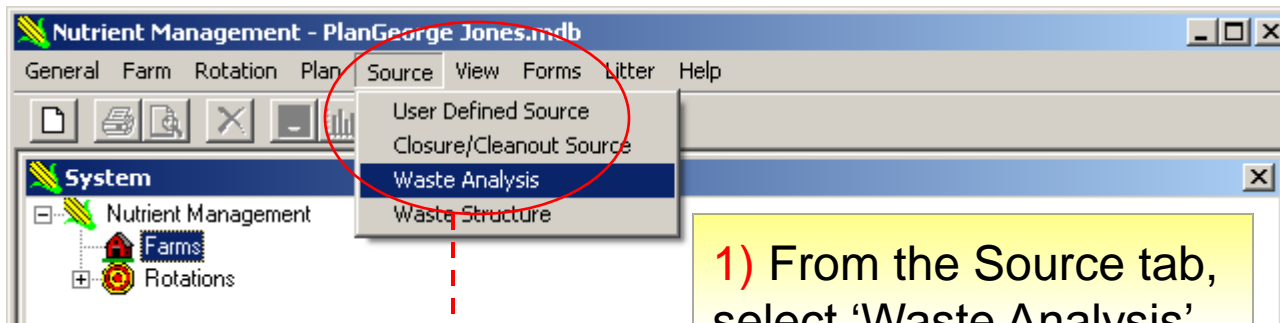
	Length (ft)	Width (ft)	Side Slopes
Top:			
Bottom:			

OK Cancel Help

*Note: the dimension information is for identification and information purposes only, it is not used in program volume calculations.

- 1) Label the structure under 'Structure Name'.
- 2) Provide length and width dimensions for the Top and Bottom of the Structure.
- 3) Provide Side Slopes.
- 4) Click 'OK' when information is complete.

Source – Waste Analysis



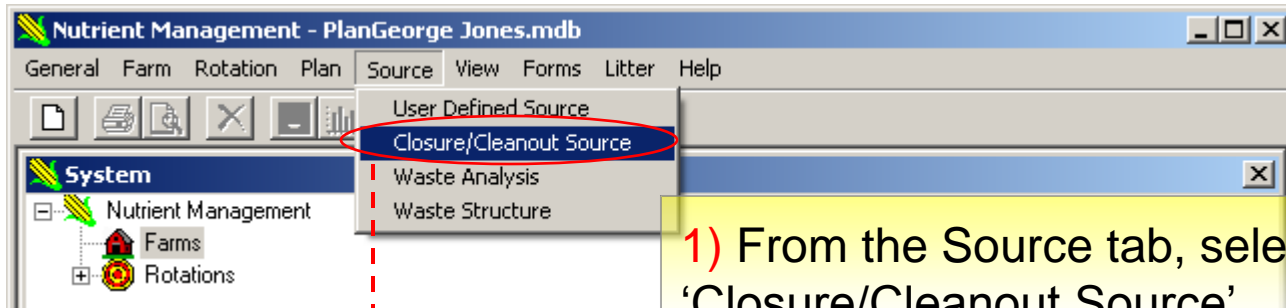
Report List: Farm: Report No.: Report Date:
Storage Structure
Name:
Waste Type:
Results (ppm)
DM%:
N: Mg:
P: Mn:
K: Zn:
Ca: Cu:



* Be sure to enter ppm values, **NOT** available nutrient values.

- 2) Click on 'New Report'
- 3) Select Farm from the drop-down menu.
- 4) Enter the Report No. and Date
- 5) Select the corresponding Storage Structure Name and Waste Type
- 6) Enter nutrient value results in **parts per million**. (Dry matter % is optional). Use 'Save' to save data and 'Exit' to exit report screen.

Source – Closure/Cleanout Source



1) From the Source tab, select 'Closure/Cleanout Source'.

The screenshot shows the 'Storage Closure/Cleanout Source' window. It contains several input fields: 'Farm:' (dropdown), 'Source Name:' (dropdown with 'New' selected), 'Source Name:' (text field), 'Date Measured:' (dropdown with '10/26/2011' selected), and 'Source Type:' (dropdown). There are buttons for 'New' (circled in red), 'Save', 'Delete', 'Help', and 'Exit'. A red dashed arrow points from the 'New' button down to the table below.

Report List:

Report No.	Structure Name	Waste Type	Waste Depth (ft)	Volume (gals)
------------	----------------	------------	------------------	---------------

2) Click the 'New' button

Source – Closure/Cleanout Source

Storage Closure/Cleanout Source

Farm: New

Source Name: New

Source Name:

Date Measured: 10/26/2011 Source Type:

New Save Delete Help Exit

Report List:

Report No.	Structure Name	Waste Type	Waste Depth (ft)	Volume (gals)
------------	----------------	------------	------------------	---------------

- 1) Select the Farm from the drop-down menu.
- 2) Enter a name for the source in the second Source Name box.
- 3) Use the drop-down calendar to enter the Date Measured.
- 4) Select the appropriate Source Type (closure or cleanout).

Source – Closure/Cleanout Source

Storage Closure/Cleanout Source

Farm: Jones' Farm

Source Name: New

Source Name: Lagoon 1 Cleanout 2011

Date Measured: 10/15/2011

Source Type: Cleanout

Report List: W06680, W08350

>>

Report No.	Structure Name	Waste Type	Waste Depth (ft)	Volume (gals)
------------	----------------	------------	------------------	---------------

- 5) From the Report List, use >> to move the report to the list in the center.
- 6) Add Waste Depth (in feet) and Waste Volume (in gallons).
- 7) Use 'Save' to save the source under the name chosen in 'Source Name'.

This example assumes separate liquid and sludge waste samples were taken. Alternatively, for a single composite sample only one waste type is identified.

Storage Closure/Cleanout Source

Farm: Jones' Farm

Source Name: Lagoon 1 Cleanout 2011

Source Name: Lagoon 1 Cleanout 2011

Date Measured: 10/15/2011

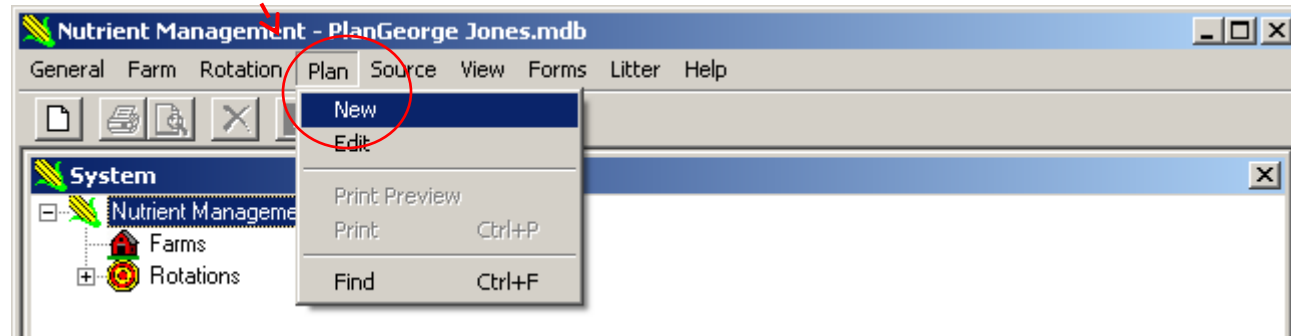
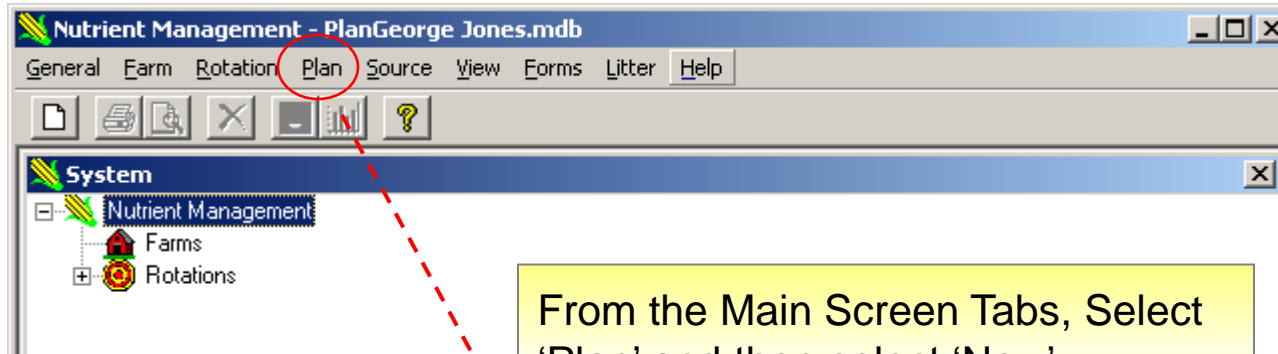
Source Type: Cleanout

Report List: W06680, W08350

>>

Report No.	Structure Name	Waste Type	Waste Depth (ft)	Volume (gals)
W06680	Lagoon 1	Swine Finishing Lagoon Liquid	4.00	1303392
W08350	Lagoon 1	Swine Finishing Lagoon Sludge	4.00	860239

Create a New Plan



Choose Plan Option

Nutrient Management Plan Option

Plan Name:

Plan Type

☐ N Only

☒ Nutrient Management

☐ Poultry Litter

Plan Option

☒ Manure Only

☐ Fertilizer Only

☐ Both Manure and Fertilizer

OK

Cancel

Help

Name the Plan and then select 'Plan Type' and 'Plan Option'

Click <OK> to activate the Plan Screen

The Plan Screen – General Tab

Note the main tabs: General, Sources, Fields, Narrative

The screenshot shows the 'Nutrient Management Plan - Nutrient Management with Manure Only - Jones Sludge Cleanout 2011' window. The 'General' tab is selected and highlighted with a red circle. The interface includes fields for Plan Name, Date, Developer, Agency, Address, City, State, Zip Code, and Phone. There are also 'Edit' buttons for Developer, Agency, Farm, and Producer. A yellow callout box points to the 'Developer', 'Agency', 'Farm', and 'Producer' sections, stating: 'Select the Developer, Agency, Farm and Producer information entered previously.' Another yellow callout box points to the 'Developer' section, stating: 'Develop the Plan by entering information in each of the individual Tabs sequentially (beginning with 'General')'. A third yellow callout box, shaped like a speech bubble with a pig icon, states: '* Use the <Edit> buttons to change info. in Developer, Agency, Farm or Producer entries.' The bottom of the window has buttons for Storage Capacity, Available PAN, Print, Print Preview, OK, Cancel, Apply, and Help.

Nutrient Management Plan - Nutrient Management with Manure Only - Jones Sludge Cleanout 2011

General Sources Fields Narrative

Plan Name: Jones Sludge Cleanout 2011

Date
Created: 10/31/2011 2:26:05 PM
Modified: 10/31/2011 3:46:33 PM

Developer
Name: [Dropdown] Edit Developer
Agency: NCDACS-DSWC Edit Agency
Address: 585 Woughtown St.
City: Winston-Salem
State: NC (North Carolina)
Zip Code: 27107
Phone: (336) 771-5000

Farm
Name: Jones' Farm Edit Farm
Producer: Jones, George Edit Producer
Address: 151 Chickadee Ln.
City: Madison
State: NC (North Carolina)
Zip Code: 27025
Phone: (336) 810-1425

Select the Developer, Agency, Farm and Producer information entered previously.

Develop the Plan by entering information in each of the individual Tabs sequentially (beginning with 'General').

* Use the <Edit> buttons to change info. in Developer, Agency, Farm or Producer entries.

Storage Capacity Available PAN Print Print Preview OK Cancel Apply Help

The Sources Tab

Nutrient Management Plan - Nutrient Management with Manure Only - Jones Sludge Cleanout 2011

General Sources Fields Narrative

Standard Source List: []

User Defined Source List: [Lagoon 1 Cleanout 2011] New Remove Source

Select the previously entered Closure or Cleanout Source from the 'User Defined Source List' drop-down menu. The information will auto-fill below.

Nutrient Management Plan - Nutrient Management with Manure Only - Jones Sludge Cleanout 2011

General Sources Fields Narrative Cleanout

Standard Source List: []

User Defined Source List: [Lagoon 1 Cleanout 2011] New Remove Source

Source Name	Source Type	Structure ID	Volume (gals)	Date Measured (mm/dd/yy)
Lagoon 1 Cleanout 2011	Cleanout	Lagoon 1	2163631	10/15/2011

In this example separate liquid and sludge components were identified. The Program used this separate volume and nutrient analysis information to generate a combined weighted average of total volume and nutrients. The assumption here is that the sludge and liquid layers will be agitated together and then land-applied.

Add Tract Information

Nutrient Management Plan - Nutrient Management with Manure Only - Jones Sludge Cleanout 2011

General Sources Fields Narrative Cleanout

Tract: [Dropdown] New

Field: [Dropdown] New

P Assessment: [Dropdown]

Copy Crop Data Paste Crop Data Remove Field Edit Nutrients

Field ID	Tract ID	Total Acres	Useable Acres	Soil Type	Crop or Rotation	P Assessment
----------	----------	-------------	---------------	-----------	------------------	--------------

New Tract

County: Rockingham

Tract ID: 1211

Farm Name: Jones' Farm

Ownership: Leased

OK Cancel Help

In the 'New Tract' dialog box, 2) select the County, 3) identify the Tract ID, 4) select the corresponding Farm Name, and 5) select Ownership (leased/owned). Use 'OK' to save info.

Add Field Information

The screenshot shows the 'Nutrient Management Plan - Nutrient Management with Manure Only - Jones Sludge Cleanout 2011' application. The 'Fields' tab is active. A red circle highlights the 'Field:' dropdown menu, and a red arrow points to the 'New' button next to it. A yellow callout box with the text '1) Add Field information by selecting 'New'.' points to the 'New' button. Below the main window, the 'New Field' dialog box is open, showing fields for County (Rockingham), Tract (1211), Field ID (1), Soil Type (Madison), Total Acres (42), Useable Acres (42), Slope Type (3 - 4), Leaching Index (0), and P Assessment (Low). The 'OK' button is highlighted. A yellow callout box with the text 'In the 'New Field' dialog box, 2) identify the field, 3) select soil type, 4) indicate total and useable acres, 5) select slope %, 6) indicate leaching index if required, and 7) select P Assessment. Use 'OK' to save field info.' points to the 'OK' button.

1) Add Field information by selecting 'New'.

In the 'New Field' dialog box, 2) identify the field, 3) select soil type, 4) indicate total and useable acres, 5) select slope %, 6) indicate leaching index if required, and 7) select P Assessment. Use 'OK' to save field info.

Crops/Rotations

Nutrient Management Plan - Nutrient Management with Manure Only - Jones Sludge Cleanout 2011

General Sources Fields Narrative Cleanout

Tract: 1211 - Rockingham New

Field: New

P Assessment:

Copy Crop Data Paste Crop Data

Single Crop Rotation

Eggplant (Fertigation)
Fescue Hay
Fescue Pasture
Gammagrass Hay
Gammagrass Pasture
Grain Sorghum, Silage
Hybrid Berm./Rescuegrass O/S Hay
Hybrid Berm./Rescuegrass O/S Pasture

Field ID	Tract ID	Total Acres	Useable Acres	Soil Type		
Field 1	1211	42	42	Madison	Fescue Hay	Low
Field 2	1211	38	38	Mayodan	Fescue Hay	Low
Field 4	1211	25	25	Clover	Fescue Hay	Low

For each field, 1) select the field under Field ID, 2) identify the single crop or rotation for that field.

Crops/Rotations

To build a new rotation: 1) click on the circle next to 'Rotation',
2) select 'New Rotation' from the drop-down list.

Nutrient Management Plan - Nutrient Management with Manure Only - Jones Sludge Cleanout 2011

General Sources Fields Narrative Cleanout

Tract: 1211 - Rockingham New

Field: New

P Assessment: New

Copy Crop Data Paste Crop Data

Single Crop

Rotation

New Rotation

Corn/Wheat/Soybeans

Fescue w/rye, millet O/S, soybean, corn

Fescue w/rye, millet, corn, soybean

Fescue w/rye, millet, corn, soybean, corn silage

Goo goo ga ga

Hybrid B.G. - SG Overseed

soybean/rye/corn

Fescue Hay

Field ID	Tract ID	Total Acres	Useable Acres	Soil Type
Field 1	1211	42	42	Madison
Field 2	1211	38	38	Mayodan
Field 4	1211	25	25	Clover

In the Rotation Properties dialog box, 3) name the rotation and identify the number of crops and years, 4) move crops from the crop list to the Crops in Rotation list using the >> button. Click 'OK' to save data.

Rotation Properties -- Corn/Wheat/Soybeans

Rotation Name: Corn/Wheat/Soybeans

Crop List:

- Annual Ryegrass - Hay
- Annual Ryegrass - Pasture
- Bahiagrass Hay
- Bahiagrass Pasture
- Barley, Grain
- Cabbage/Broccoli
- Caucasian/Old World Blue
- Caucasian/Old World Blue
- Cereal/Annual Rye O/S,
- Cereal/Annual Rye O/S,
- Common Bermudagrass H
- Common Bermudagrass P.
- Corn, Grain
- Corn, Silage
- Corn, Sweet
- Cotton

Number of Crops: 3

Years of Rotation: 2

Crop Year:

Crops in Rotation:

Crop	Start Month	End Month	Year
Corn, Grain	2/15	6/30	1
Wheat, Grain	9/1	4/30	1-2
Soybeans, Manured, ...	4/1	9/15	2

OK Cancel Help

Edit Nutrients

Step 1

3-Step Process: Edit Nutrients > Edit Sources > Application %

Nutrient Management Plan - Nutrient Management with Manure Only - Jones Sludge Cleanout 2011

General Sources Fields Narrative Cleanout

Tract: 1211 - Rockingham New

Field: New

P Assessment: New

Single Crop Fescue Hay

Rotation New

Copy Crop Data Paste Crop Data Remove Field Edit Nutrients

Field ID	Tract ID	Total Acres	Useable Acres	Soil Type	Crop or Rotation	P Assessment
Field 1	1211	42	42	Madison	Fescue Hay	Low
Field 2	1211	38	38	Mayodan	Fescue Hay	Low
Field 4	1211	25	25	Clover	Fescue Hay	Low

- 1) Select the Field of interest,
- 2) Click the 'Edit Nutrients' button,
- 3) Identify the number of sources,
- 4) specify whether all or part of the PAN will come from the Source, and
- 5) click the 'Edit Sources' button.

Nutrient Management Plan - Nutrient Management with Manure Only - Jones Sludge Cleanout ...

Crop 1

Crop Name: Fescue Hay Soil Type: Madison Field ID: 1

Prior Crop: P Assessment: Low Crop Year: N/A

Number of Sources: 1 P Removal (lbs/ac): 61

☐ R.Y.E. by User 3.9 R.Y.E. Unit: Tons

☐ N Factor by User 44.4 Default N: 0

View Available PAN Edit Sources

(lbs/Acre)	N	P205	K20	Ca	Mg	Mn	Zn	Cu	Lime
Recommended	173	0	80	0	0	0	0	0	0.9
Starter	0	0	0	0	0	0	0	0	0.0
Residual	0	0	0	0	0	0	0	0	0.0
Required	173	0	80	0	0	0	0	0	0.9
Source 1	173	0	0	0	0	0	0	0	0.0
Balance	-173	0	-80	0	0	0	0	0	-0.9

OK Cancel Apply Help

Edit Sources

Step 2

3-Step Process: Edit Nutrients > Edit Sources > Application %

Nutrient Management Plan - Nutrient Management with Manure Only - Jones SI...

Field ID: 1 Crop: Fescue Hay Application Method: Broadcast

Source List:

- Lagoon 1 Cleanout 2011

Source Selected:

0	1
Source Name	Lagoon 1 Cleanout 2011
Source Type	Cleanout
Application Method	Broadcast
Nutrients From Source/Acre	173
Waste Application Unit	gals
Application Rate/Acre	29898
Application Rate/Field	1255707
Application Inches/Acre	1.10

Application Percentage Storage Capacity

OK Cancel Apply Help

1) Be sure the Source is highlighted in the Source List, 2) Select the Application Method, 3) verify the information that auto-fills under Source Selected, and 4) click the 'Application Percentage' button.

Application Percentage

3-Step Process: Edit Nutrients > Edit Sources > **Application %**

Step 3

1) Assign monthly application percentages, (based on crop nutrient needs and site specific production practices), 2) total monthly percentages to 100%, 3) select 'Save As Default' to apply the percentages-by-month to all fields in the Plan with the same crop when the same nutrient source is selected, 4) use the 'OK' button when information is complete.

Nutrient Monthly Percentage for Crop

Crop Name: Fescue Hay
Source Name: Lagoon 1 Cleanout 2011

Application Period:
☒ Suggested ☐ User Defined
Start Month: 8/1 End Month: 7/31

Percentage:
January: 0 July: 0
February: 10 August: 0
March: 20 September: 20
April: 20 October: 20
May: 0 November: 10
June: 0 December: 0
Total: 100 %

☒ Save As Default

OK
Apply
Cancel
Help

Nitrogen Recommendations:
Apply 40 to 60 lb/ac nitrogen at planting for pure stands only. Do not apply N for mixtures with clovers but use proper legume inoculation techniques. Apply 150 to 200 lb/ac. N to pure-stand fescue for hay production; reduce N rates by 25% for grazing. Apply N Feb. 1 to Mar.

Application Percentage

Step 1

Step 2

Step 3

3-Step Process: Edit Nutrients > Edit Sources > Application %

Repeat the 3-Step process for all crops/rotations in all fields in the Plan.

Be sure to complete the process for all members of a rotation in a given field!

Nutrient Management Plan - Nutrient Management with Manure Only - Jones Lagoon Closure

Crop 1 | Crop 2 | Crop 3

Crop Name: Corn, Grain Soil Type: Madison Field ID: 1

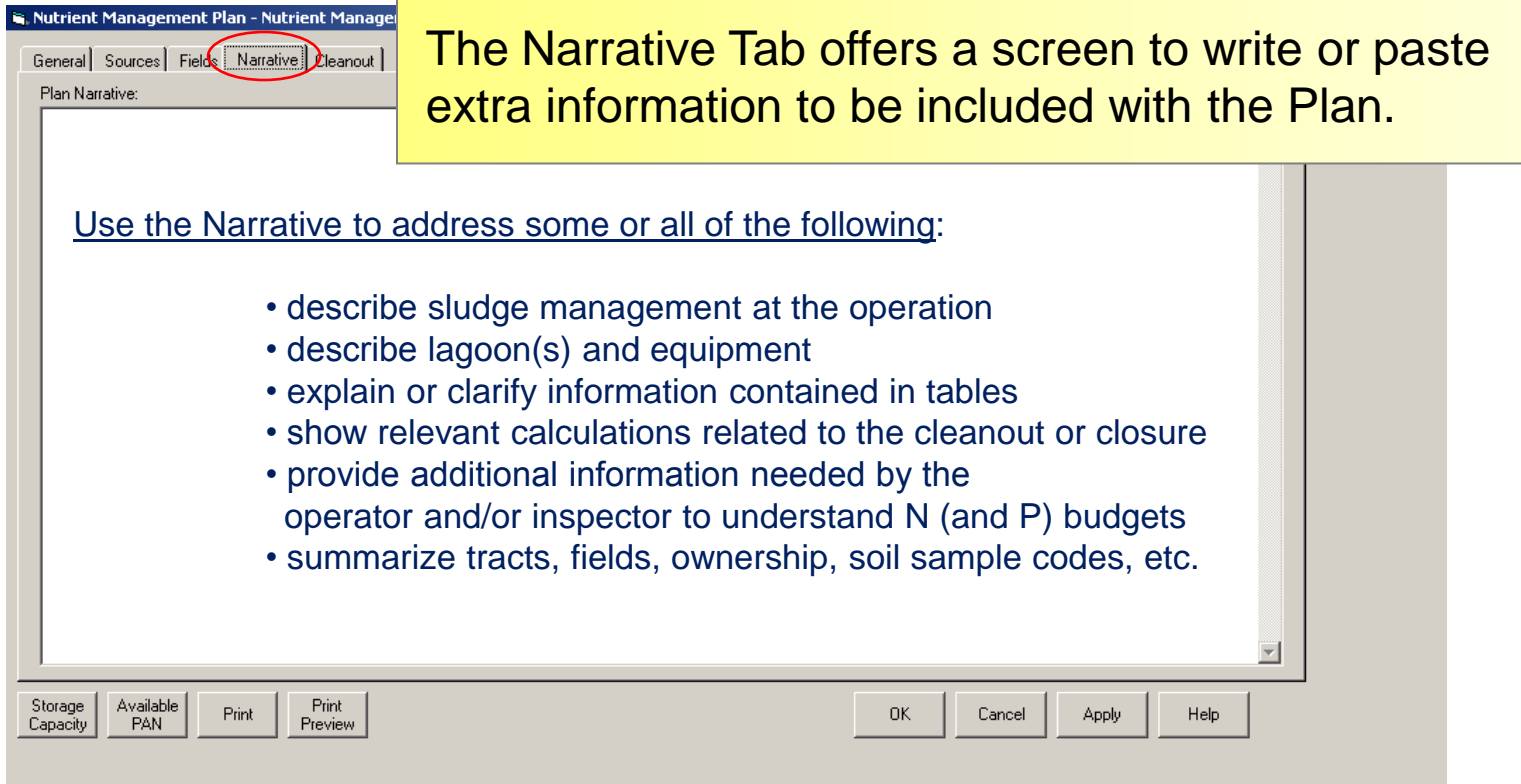
Use the Copy Crop Data button to copy the completed 'Edit Nutrients' information from a field to other fields with the same crop or rotation assigned.

Field: [dropdown]
P Assessment: [dropdown]
Rotation: Corn/Wheat/Soybeans

Copy Crop Data Paste Crop Data Remove Field Edit Nutrients

Field ID	Tract ID	Total Acres	Useable Acres	Soil Type	Crop or Rotation
Field 1	1211	42	42	Madison	Corn/Wheat/Soybeans
Field 2	1211	38	38	Mayodan	Corn/Wheat/Soybeans
Field 4	1211	25	25	Clover	

Narrative



The screenshot shows the 'Nutrient Management Plan - Nutrient Management' window. The 'Narrative' tab is selected and highlighted with a red circle. The 'Plan Narrative' section contains a list of topics to address. The bottom of the window features buttons for 'Storage Capacity', 'Available PAN', 'Print', 'Print Preview', 'OK', 'Cancel', 'Apply', and 'Help'.

The Narrative Tab offers a screen to write or paste extra information to be included with the Plan.

Use the Narrative to address some or all of the following:

- describe sludge management at the operation
- describe lagoon(s) and equipment
- explain or clarify information contained in tables
- show relevant calculations related to the cleanout or closure
- provide additional information needed by the operator and/or inspector to understand N (and P) budgets
- summarize tracts, fields, ownership, soil sample codes, etc.

Cleanout and Closure Tabs

In this **Cleanout** example a tab entitled 'Cleanout' appears when the User Defined Source is identified in the Sources tab. Include general Lagoon Cleanout information here.

The screenshot shows a software window titled "Nutrient Management Plan - Nutrient Management with Manure Only - Jones Sludge Cleanout 2011". The interface has a tabbed menu at the top with "General", "Sources", "Fields", "Narrative", and "Cleanout". The "Cleanout" tab is selected and circled in red. Below the tabs, there are two dropdown menus: "Standard Source List:" and "User Defined Source List:". The "User Defined Source List:" dropdown is currently set to "Lagoon 1 Cleanout 2011". To the right of these dropdowns are two buttons: "New" and "Remove Source".

In a **Closure Plan** option there will be four Closure tabs:

Tab I – General Info.

Tab II – Closeout Condition and Removal of Inflow Devices

Tab III – Installation of Spillway and Description of Buffers and Setbacks

Tab IV – List of Attachments and Other info.

The screenshot shows the same software window as before, but now the "Closure I" tab is selected and circled in red. The tabbed menu at the top includes "General", "Sources", "Fields", "Narrative", "Closure I", "Closure II", "Closure III", and "Closure IV". Below the tabs, the text "GENERAL:" is visible, indicating the start of the information entry for the selected tab.

Print Preview & Print

Use 'Print Preview' to view sections of the Plan separately. Individual sections can also be printed from the Preview Screen. Use 'Print' to print the entire Plan at once.

The screenshot displays the 'Nutrient Management Plan - Nutrient Management with Manure Only - Jones Sludge Cleanout 2011' window. The 'General' tab is active, showing fields for Plan Name, Date, Developer, Agency, Address, City, State, Zip Code, and Phone. A 'Preview Reports' dialog box is open, listing various reports available for preview or printing. At the bottom of the main window, the 'Print' and 'Print Preview' buttons are circled in red, with a red dashed arrow pointing from the 'Print Preview' button to the 'Preview Reports' dialog box.

Nutrient Management Plan - Nutrient Management with Manure Only - Jones Sludge Cleanout 2011

General | Sources | Fields | Narrative | Cleanout

Plan Name: Jones Sludge Cleanout 2011

Date
Created: 10/31/2011 2:26:05 PM Start Closure: 11/1/2011
Modified: 11/3/2011 4:08:22 PM End Closure: 5/1/2012

Developer
Name: Joe Hudyncia
Agency: NCDACS-DSWC
Address: 585 Waughtown St.
City: Winston-Salem
State: NC (North Carolina)
Zip Code: 27107
Phone: (336) 771-5000

Farm
Name: Jones' Farm

Preview Reports

Related Reports:

- Cover Sheet
- Sources in Plan
- Planned Crops Summary
- Closure/Cleanout Waste Util.-Year 0
- Waste Utilization
- Nutrient Management Recommendations
- Required Soil Test Values
- Required Specifications
- Crop Notes
- Cleanout Cover Sheet
- Source Description
- Land Application Table
- Soil Metal Indices
- Cleanout Text

Storage Capacity Available PAN **Print** **Print Preview** OK Cancel Apply Help